A MODERN QUIXOTE.

O for the days of chivalry,
Of knights and bards and pages.
And griffins and dwarfs and alchemy,
And grants and wizard sages;
When wandering knights could bring redress
To Jadies plunged in deep distress
And iron cages.

His is a pairry soul who'd fear
In errantry to rough it:
Or, armed with buckler, greave and spear,
Would shan a foeman's buffet:
Or could not, in his hours of rest.
Pillow his head on a maiden's breast
Or on a tuffet.

I would not have you think me boast (Though it does sound like braggin'). But what I would desire the most Is chance to fight a dragon: For pay I'd to my lady true.

And quaft sweet nectar from her hip And from a flagon.

See, new the merry jonst we ride;
All don the casque and vis T;
Stont blows resound from side to side—
The victor! Sure its L sir.
Lost is the day to the other chaps.
While L, the cong'ror, lose, perhaps,
One sound mersor.

And now the country round about
Is wild with consternation;
A dracon, ten yards from tail to shout,
Creates rare devastation.
The heralds march from town to town,
And shout, in tones which all clse drown,
A proclamation;

"Thus saith the King, Gehezmahail:
Know all men by this present—
Whoe, or will flav the dragon's tail
Will make his future pleasant—
Our daughter he shall have to wed:
Gold, too, we'll give. And this is said
To knight or peasant." Then out step 1. Tis what I wish.
With naught but sword I'm laden;
I scale him as I would a fish
And soon in blood I'm wadin.'
The min-trels sing my exploits bold,
But better still, I have the gold.
Also the maiden.

Whose is the face the Princess bears
In this my idle dreaming?
The fair as evening when she weats
Her crown with star points to ening—
Look in thy glass, sweet Valentine—
That face is hers, this love of mine,
Upon thee beaming.

SCIENCE FOR THE PEOPLE.

CONSCIOUS AUTOMATONS.

CONSCIOUS AUTOMATONS.

In an insect's body, says Mr. Grant Allen, there is no regular subordination of all the partis composing the nervous system to a single central organ, like the brain in man. The largest knot of nerve-matter, it is true, is generally to be found in the neighborhood of the sense-organs, and it receives direct nerve-bundles from the eves, antenna, mouth and other chief adjacent parts; but the wings and legs are moved by separate knots of nerve-cells, connected by a sort of spinal cord with the head, but capable of acting quite independently on their own account. Thus, if we cut off a wasp's head and stick it on a needle in front of some sugar and water, the mouth will greedily begin to cat the sweet syrup, apparently unconscious of the fact that it has lost its stomach, and that the food is quietly dropping out of the guilet at the other end as fast as it is swallowed. So, too, if we decapitate that queer stones. lowed. So, too, if we decapitate that queer insect, the praying mantis, the headless body will still stand catching flies with its outstretched arms, and fumbling about for its mouth when it has caught one, evidently much surprised to find that its head is unaccountably

issing. In fact, whatever may be the case with man, In fact, whatever may be the case with man, the insect, at least, is really a conscious automatou. It sees or smells food, and it is at once impelled by its nervous constitution to eat it. It receives a sense-impression from the bright hue of a flower, and it is irresistibly attracted toward it, as the moth is to the candle. It has no power of deliberation, no ability even to move its own limbs in unaccustomed manners. Its whole life is governed for it by its fixed nervous constitution, and by the stimulations it receives from outside. And so, though the world probably appears much the same to a beetle as to us, the nature of its life is very different. It acts like a piece of clock-work mechanism, wound up to perform a certain mechanism, wound up to perform a certain number of fixed movements, and incapable of ever going beyond the narrow circle for which it is designed.

WHY THE PRAIRIES ARE TREELESS. Mr. L. F. Ward gives in *The Kansas City Review* some reasons why the Western plains are destitute of forests. Where the annual rainfall exceeds twenty-four inches the absence rainfail ex-of forests is undoubtedly due to the repeated burnings which take place on the prairies from human agency. Where the annual rainfall is human agency. Where the annual rainfall is below twenty, or perhaps twenty-four, inches, there can be no growth of forests, and this is the true cause of the absence of trees on the great plains. But this does not prevent the ex-istence in and regions of certain specialized types of arborescent vegetation. The sage brush that covers the dreary wastes of the Bocky Mountain region, the Larannie plains, the Bitter Creek valley, and such vast areas of the West, while in its botanical characters it is little more than an overgrown, weed, is to all there can be no growth of forests, and this the West, while in its botanical characters it is little more than an overgrown weed, is to all intents and purposes a tree, and often attains a great age. The region it occupies is even more arid than the great plains, yet no fires occur and no forests grow. In the nearly rain-less areas of arizona, Southern Utah and New-Mexico, and stretching eastward into Texas, there occur a number of arborescent forms, the creosote bush (Larrea Mexicana), the mesquit (Prosopis juliflora) various acacias mimosas, and one yucca (Y. brevifolia). gether with the tree cactus (Cercus giganteus). These grow scattered at great distances from each other and rarely form thickets or groves.

of a vaporous atmosphere.

In the autumn of 1877 and spring of 1878, a number of minute, straight, black or dusky bands were detected by Schiaparelli, traversing and subdividing the supposed continents in various directions. These have been called from their aspect "canals," though, of course, their scale entitles them rather to the appellation of straits, or very long, narrow atms of the sea. A few of these had been previously seen by various observers, but to the Italian

To copy engravings in ink from paper or glass, The Scientific American gives these directions: Flow the glass plate with good photographer's negative varnish thinned down somewhat, and when this has partly dried (so that the varnish will not run into the paper) lay the smoothly printed side down upon the varnished surface, and put it under slight uniformly apportioned pressure for twenty-four hours. Then moisten the back of the paper, and by means of a piece of soft rubber rub off the soft-ened paper. If this is done with care the inked

lines will remain attached to the varnished glass surface. As the thin varnish is quite transparent, this is equivalent to transferring the engraving to the glass surface. The transfer is frequently improved in appearance by giving the plate (and transfer) a second coat of the varnish. For lantern purposes it is better to cover the surface bearing the transfer with a second plate of glass, and bind the edges with thin cloth or stout paper.

THE KOLA NUT.

that substance is wholly free, not combined, as in coffee, with an organic acid. The action of the cateine is aided by a considerable quantity of theobromine present. Next there is a notable amount of glucose, of which there is none in cocoa. The nut contains twice as much starch as is found in seeds of theobroma. There starch as is found in seeds of theofroma. There is little fatty matter, and a special tannin, together with a red coloring matter, is present. As a remedy, the Kola nut is appreciated by the Africans in affections of the intestines, liver, etc.; it may be ranked medically with coea and like matters, over which, however, it has an advantage in possessing so much tannin, which gives it action each properties. gives it astringent properties.

PHOTOGRAPHING ROWERS.

PHOTOGRAPHING ROWERS.

Mr. R. A. Proctor suggests in Knowledge that the rowing men of Cambridge and Oxford should invite Mr. Maybridge, who recently succeeded in photographing a horse at full gallop, to photograph in a similar way the action of a fast rower or sculler. He knows that Mr. Muybridge would gladly do his part it the expenses were guaranteed, and he offers to subscribe £50 toward an expense fund. Mr. Proctor thinks that if these photographs were made, the principles of a good rowing style and the secret of successful oarsmanship could readily be determined. Hanlan, too, he says, might be persuaded to row past the cameras and so hand down to posterity the perfection of his marvellous style.

DANTE GABRIEL ROSSETTI AS AN ARTIST

Within the branching shade of Reverie.

The greatest works of Rossetti are two. The first is "The Bride," or "The Beloved," an illustration of the Song of Solomon, which belongs to Mr. Rae, and comprises five life-size, three-quarters-length female figures and a negro girl. A marriage procession appears to have halted, and the women press closely on one another, so that their brilliant carnations and the splendor of their dresses are brought together to form a glowing mass. The bride is clad in apple-green silk, superbly embroidered with flowers and leaves, and she wears a veil of tissue of a differing green; on her head is an the sea. A few of these had been previously seen by various observers, but to the Italian astronomer belonged the credit of developing and delineating them as a system. At the ensuing return of the planet in 1879-80, they were again detected and drawn by him, with very little difference. But during the course of last January and February he has been so fortunate as to perceive the duplication of these dark streaks by the addition of parallel lines of similar character and length in no fewer than twenty instances, covering the equatorial region with a strange and mysterious network, to which there is nothing even remotely analogous on the earth, and which leads us at once to see how premature have been our conclusions in this respect, and how far we still are from any adequate conception of the real constitution even of our nearest neighbor but one in the solar system.

COPYING ENGRAVINGS.

To copy engravings in ink from paper or glass, The Scientific American gives these directions and the solar system.

In a price is clad in apple agreen; on her bead is an aigrette or scallet cnamel and gold, resembling aigret

Afar away the light that brings cold cheer
Under this wall—one instant and no more
Admitted at my distant palace-door.
Afar the flowers of Enna from this drear,
Dire fruit, which, tasted once, must thrall me here.
Afar those skies from this Tartarean gray
That chills me; and afar, how far away.
The nights that chall be from the days that were.

Afar from mine own soil I seem, and wing
Strange ways of thought, and listen for a sign;
And still some heart unto some soul doth pine,
(Whose sounds mine inner sense is fain to bring,
Continually together murmuring:
"Woe's me for thee, unhappy Prosorpine!"

have sprung from a common origin; that the have sprung from a common origin; that the wide varieties of life are due not to separate creative acts or providential interterences, but to the gradual operation of natural causes operative through illumitable cycles of epochs, —in short of the two great factors which have produced even toward anymate life, the sur-THE KOLA NUT.

The properties of the Kola nut, which is largely used in Central and Western Africa, have been lately elucidated by MM. Heckel and Schlegdenhauffen, who, in a paper to the French Academy, gave an analysis of the substance. The cotyledons of the seed are the only part the negroes use. The effects are those of a stimulant and tonic; and impure water is rendered agreeable by previous use of the nut. The analysis shows that the Kola nut has more cafeine than the best coffees, and that that substance is wholly free, not combined, as in coffee, with an organic acid. The action of selection from the charge of the control of the control of the charge of In a marcellous style.

DANTE GARRIER ROSSITH AS AN ARTISS print of the Alleman.

Form in Lorent Alleman.

Form in Lorent

Model as the condition of contract of contract of the condition of the con turive as well as the sage brush further west of the South.

CANALS ON THE PLANET MARS.

The Rev. T. W. Webb, author of "Celestial Objects for Common Telescopes," writes thus to The London Times respecting Schiparelly's history of "canals" on the planet Mars: It has lengther before the manifect of the South of the S

ATTENDANCE AT BOSTON CHURCHES.—The Boston Advertiser took steps two Sundays ago to ascertain by actual count the number of persons attending the services of the various churches of that city. The tables, as published, reveal some interesting facts. Not the least interesting is the large attendance at the Catholic churches. These churches number only thirty out of a total of 190—or less than one-sixth of the whole, but they furnish 49,337 out of the total number of 124,909 church-goers, or almost exactly two-fifths. In some instances of the total number of 124,909 church-goers, or almost exactly two-fifths. In some instances these numbers are swollen by the aggregate of three or four different services, but on the other hand the early morning service is in many cases not reported, and it is probably under the truth rather than in excess of it to say that 50,000 people regularly attend the services of the Catholic churches of the city. The

DARWIN.—A large number of religious journals devote considerable space this week to critical estimates of Darwin and his system. Speaking of the doctrine that all forms of lite have spring from a common origin; that the wide varieties of Marking of the doctrine that all forms of lite have spring from a common origin; that the churches average 268 each; twenty-four Unitarian Congregational churches, 389; nine Universalist churches, 259. On the other hand, the twenty-five Trinitarian Congregational churches average 600 each; twenty-three Baptist churches, 686; twenty Episcopal churches, 602; twenty-five Methodist churches, 455; and seven Presbyterian churches, 471. The churches classed as Liberal furnish only 12,468 church-goers, or about one-tenth of the total. The religious services of the Young Men's Christian Association were attended by 1,314; those of the Young Men's Christian Union by 300. Of the Episcopal churches the largest figures are reported from the churches representing the two extremes—Trinity 2,700.

true, but suppose a clergyman of like age and infirmities had been entrapped, would the papers generally be ready to accept such an explanation?

explanation?

A writer in the journal published by the "Bureau of Conference Sessions" of the New-England Conference suggests that the Conference ought to meet every year in Boston—one strong argument for this being that a hungry Methodist minister, who was in need of a supper in Worcester, asked a resident of the place where he could get his wants supplied, and was answered, "I don't know, but when I want anything could to get I go to baston."

One of the daily papers says: "The best people of New-York crowded the theatre'to hear Ingersoll." In what sense is the word best there used? The best in morals, wisdom and wealth? Best in what? If they were the best, what sort of people are the worst?—[The New-York Observer.

"What is this man charged with?" asked the judge. "With tentions policeman.

HOME INTERESTS.

PRICES PAID FOR PROVISIONS. WHAT IS TO BE FOUND IN THE MARKETS-FLOWERS

buyers in search of fresh produce. Pots of growing hour, plants crowd the sidewalks. Roses are 50 cents to CRE \$1 each, geraniums 15 to 10 cents, pansies 10 cents a root, verbenas 50 cents a basket of a dozen roots, English daisies 50 cents a dozen. The first arbutus of the season is now offered at 10 cents a root, though the root is of no more value than a cluster representing the two extremes—Trinity 2,700, and the Church of the Advent 2,200. Twelve of the Catholic churches show an attendance of more than 1,500 each—the largest being St. Joseph's, with 7,075, and the next largest the Church of the Holy Trinity with 3,408.

The church of the Foot is of no more value than a closter of blossoms. The plant will scarcely survive a scason. It puts forth its flower bads in the autumn, and if a plant already budded is then taken from the forest and placed in a fernery it will blossom during the winter, though the root dies in the spring.

Fish has been abundant during the week, though

MENU
Macaroni Soup with Grated Cheese,
samon, Lobster sauce, Cucumbers,
sweethroads, Larded, with Green Peas,
Fillet of Reed with Mishrooms, Pointoes, Resta,
Loast Disk, Aprile Sauce, Suratora Chips,
Salad of Letting and Water Cress, Plan Dressing,
Cheese, Wafers, Grava Jelly,
Frenca Creum, Stravberries, Cake,
Nuts and Hassins,
Coffee,

HOUSEHOLD NOTES.

Macanont Sorr.—Make a rich beef stock, fla-bred nigals in any way you may choose. Parboll is much micearon as you wish to use in boiling alted water; when it is quite tender at will take ry minutes, cut it into small process on in length, threw them into the boil-let them boil with it a few minutes agir. Hand graved Parmesan cheese on

PARMESAN OMERET.—Beat up three ergs with pepper and sait to taste, and a tablespoonful of grated Parmesan cheese; put a piece of butter the size of an egg into the omelet-pan; as seen as it is melted pour in the ergs, and holding the handle of the pan with one hand, stir the omelet with the other by means of a flat spoon; the moment the omelet begins to set cease stirring, but keep shaking the pan for a minute or so, then with the spoon double up the omelet, and keep on shaking the pan until the under side of it is of a good color. Turn it out on a hot disa, colored side uppermost, and serve quickly.

MARLERGROUGH PIE.—One pint of grated apoles orner by means of a flat spoon; the moment the onelet begins to set cease stirring, but keep shaking the pan for a minute or so, then with the spoon double up the omelet, and keep on shaking the pan until the under side of it is of a good color. Turn it out on a hot disp, colored side uppermost, and serve quickly.

MARLIBORDUGH PIE.—One plut of grated apples,

one pint of fresh milk or cream, two eggs, well beaten separately, two tablespoonfuls of melted butter, the grated peel of one lemon, one wine-glassful of brandy, sugar to taste. Bake in rich puff-paste.

WHAT IS TO BE FOUND IN THE MARKETS—FLOWERS
OFFERED FOR SALE—THE PRICE OF BEEF UNUSUALLY HIGH—SOUTHERN FRUIT AND VEGETABLES ARRIVING IN LARGE QUANTITIES.
The baimy weather of May is already here and
the down-town markets are filled with a throng of
the down-town markets are filled with a throng of
a large mould, in a slow but steady oven, about an
hour.

hour.

CREAM CAKE.—Two cupfuls of pulverized sugar, two-thirds of a cupful of butter, four eggs, half a cupful of milk, haif a teaspoonful of soda, one teaspoonful cream of tartar, three cupfuls of flour. Bake in jelly-cake paus and spread between the layers the following: Cream—Half a pint of milk, two full teaspoonfuls of corn-starch, one egg, one teaspoonful of vanitia, half a cupful of sugar; let the milk come to a boil and sir in the corn-starch made into a sugar, where with a little gold milk; take out a to a boil and stir in the corn-starch made into a smooth paste with a little cold milk; take out a little of the boiling milk and add it gradually to the well-beaten egg and sugar; stir this into the rest of the milk and continue to stir constantly until it becomes quite thick and smooth.

A HAPPY DAY.

From Andrews's Bazar. Sailing o'er the dancing deep. Our boats the same sweet music keep; The san shines bright O'er the billows light; It is our happy day.

Far in the broad and smiling blue I see a cloud, and so do you; It's coming near, 'Twill soon be here; Our bright day will not stay.

The tide is running out to sea, Our boats are drifting; so are we; Let's steal a ray Of our bright day, And hide it far where none can tell.

Let's lock it in our own deep bliss,
And seal it with our lover's kiss,
And throw it deep
Whiere mermaids sleep,
Down deep in their coral dell
KATE V. FERGUSON.

THE BLUE-COAT BOYS.

From The London Telegraph.

Pity has been abundantly and gratuitously lavished on the Bine coat boys, who are compelled by the laws of their school to go about bareheaded in most weathers. The actual sight of the yellow stockings, the long clock buckled round the middle—looking like something between an ulster and a dressing gown—and the head entirely destitute of any covering beyond that which nature has given it, has often led to a notion that the rime-coat boys are brought up to endure the most terrible hardships. However, experience would probably soon convince anybody who thed a short spell of going about hatless or bounetless—provided he did not catch coid—that many much worse evils have to be encountered in the course of a life's career about hatless or bonnetless—provided he did not catch coid—that many much worse evils have to be encountered in the course of a life's career than this particular infliction. The saving of time and trouble in not having to take of the hat in presence of superiors, for instance, must in itself be an appreciable benefit. Yet Blue-coal boys are not so badly off, after all, for they may carry the useful umbrella about with them in case of rain. Consequently it may be asserted with some confidence that but little additional convenience would be accorded to the Newgate-street scholars were they all at once to break out into head-coverings, while we should be deprived of a picture-sque and original costume in the metropolitan streets if these boys took to the same outward habilments as other lads.

One distinct advantage of the Blue-coat uniform lies in the case with which it embles the scholars of Christs Hospital to be identified among any assemblage, in London or elsewhere. All schools go in more or less for some distinctive and pseuliar dress among their pupils, for the necessary purposes of discipline. From insists on the packet and collar, below a certain age, and our other public schools prescribe black coats and straw hats, or trencher caps, and in some instances black ties, as the regulation raiment. One of these days, perhaps, reform will triumph over the present Blue-coat uniform. Yet who will not be wait the chance that roles as of the time-honored garb of Camden and Coleridge, and sends their successors out to roam the streets arrayed in the monotonous propriety of a chumney-pot hat f Possibly the Urecians may walk with

and sends their successors out to roam the streets arrayed in the monotonous propriety of a channey-pot hat? Possibly the Greecans may walk with increased self-pespect if divested of the stocking, but as regards the mass of "Blues" the gown is probably regarded with a mixture of pride merging into indifference. "Our dress," says the minitable Fin, "was of the coarsest and quantest kind, but was respected out of doors, and is so still. It consisted of a blue drugget gown, with ample skirts to it; a yellow vest underneath in winter time; small clothes of Blussian duck, worsted yellow stockings, a leathern girdle, and a little black worsted cap, usually carried in the hand. We used to flatter ourselves that the dress was taken from the monks, and there went a monstrous tradition that at one ourselves that the dress was taken from the monks, and there went a monstrous tradition that at one period it consisted of blue velvet with silver buttons." Yesterday's procession to the Manson House, and afterward to church, was noticeable, among other things, for the budge carried by some of the scholars on their breasts, with the words "He is risen" inscribed therenoon. This is in accordance with the injunctions of an ancient legate, whose last will and testament directed that a certain number of boys should wear gloves bearing the device in question in Easter week. Herein we have an instance of the way in which the Christ's Hospital of the present feels the influence of the past, the "grasp of the dead hand," in all its ceremonials—but no unkindly or unbeneficial grasp, after all.

THE THREE COLD DAYS OF APRIL.

E. H. Proctor in Knowledge.

Few weather phenomena in this country are more remarkable, and seem at present less easily explained, than the so-called "borrowing days," as they are called, between the 10th and 14th of April, when usually the temperature falls considerably below that due to the time of year. The cold at this time is, at any rate, sufficiently marked—first, to have attracted long since general attention; and, secondly, to affect in a very obvious manner the average temperature for these days during the last eighty years. We find these three could days of April, which before the change of style were the first shree days of the month, thus described in doggerel lines in the North of Enguand;

"March borrows from April." R. H. Proctor in Knowledge.